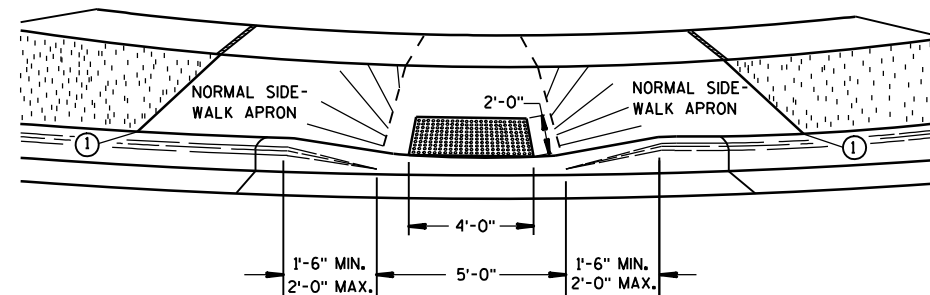
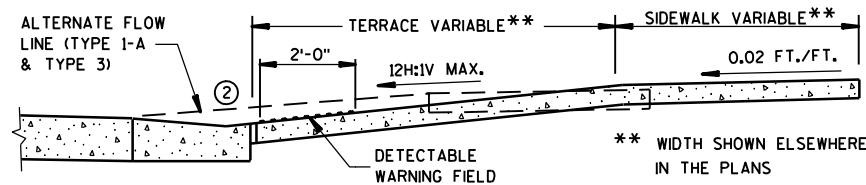


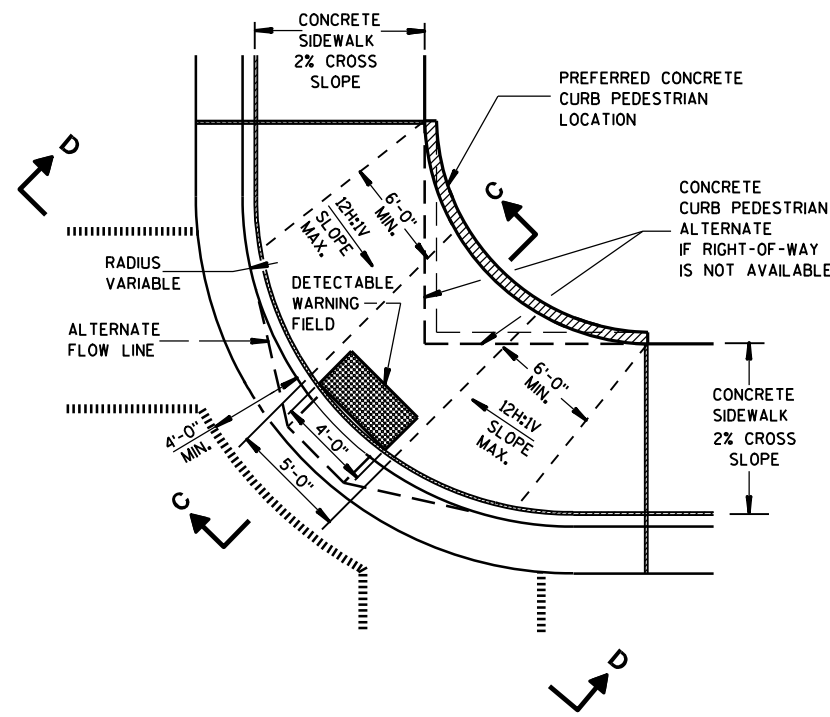
**PLAN VIEW  
TYPE 1 RAMP**  
(CENTER OF CORNER RADIUS)



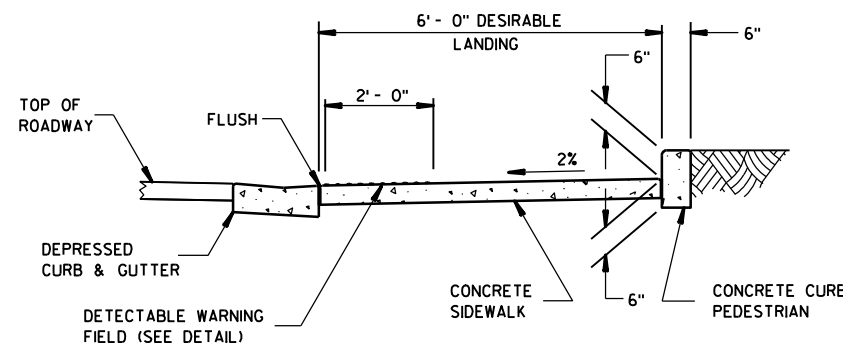
**VIEW A-A**



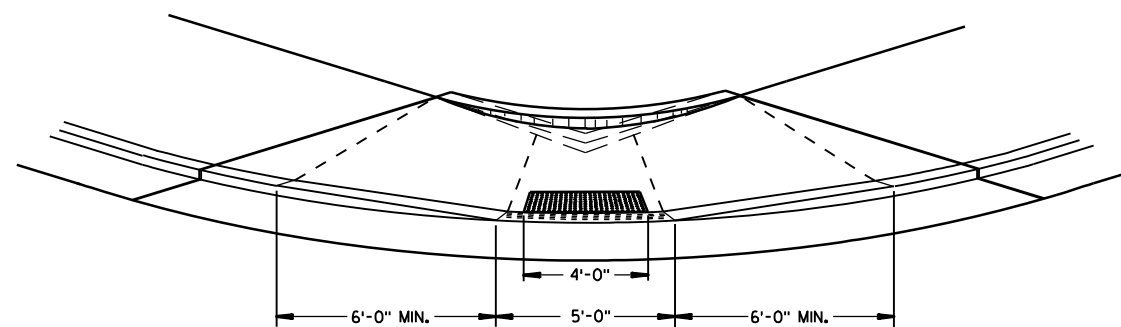
**SECTION B-B**



**PLAN VIEW  
TYPE 1-A RAMP**  
(NO TERRACE)



**SECTION C-C**



**VIEW D-D**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

## LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- - - ALTERNATIVE LAYOUT

*Curb Ramps Types 1 and 1-A*

**References:** [FDM 11-25-30](#) and [FDM 11-20-1](#)

**Bid items associated with this drawing:**

<u>Item #</u>	<u>Title</u>
601.0600	Concrete Curb Pedestrian (LF)
602.0505	Curb Ramp Detectable Warning Field Yellow (SF)
602.0510	Curb Ramp Detectable Warning Field White (SF)
602.0515	Curb Ramp Detectable Warning Field Natural Patina (SF)
602.0405	Concrete Sidewalk 4" (SF)
602.0410	Concrete Sidewalk 5" (SF)
602.0415	Concrete Sidewalk 6" (SF)
602.0420	Concrete Sidewalk 7" (SF)
646.0113 - 646.0119	Pavement Marking (Material) 6-inch (LF)
647.0763 - 647.0769	Pavement Marking Crosswalk (Material) 6-inch (LF)

**Standardized Special Provisions associated with this drawing:** None

**Other SDDs associated with this drawing:** 8D5-b, c, d & e and 15C8-sheet 'e' are required when this drawing is called for in the plans.

**Design Notes:** The Type 3 should be used only when there may be utilities or other fixed objects in the way of the curb ramp installation and cannot be relocated.

The Product Acceptable List (PAL) has only cast iron products for the Detectable Warning Field (DWF). The typical size of DWF panel in cast iron is 2 ft x 2 ft. Other cast iron panel sizes available include 2 ft x 1 ft, 2 ft x 1.5 ft, 2 ft x 2.5 ft, and 2 ft x 3 ft. The site-specific application will always be wider than 2 feet, thus multiple DWF panels are required for each installation. In many applications it may be desirable to stagger the panel longitudinally to allow a panel to be installed close to the back of curb. Do not stagger the panels transversely across the sidewalk or path.

The Detectable Warning Field shall be installed in fresh concrete. The area under the Detectable Warning Field is paid as concrete sidewalk. Do not install the Detectable Warning Field in or on asphaltic pavement.

Do not install drainage grates in the path of curb ramp or sidewalk users. Slope the gutter pan so the curb ramp area will drain away from the pedestrian crossing.

Shared use paths are typically 10 ft wide, with some 8ft and some 12 ft. The Detectable Warning Field shall extend from 0 inches to 6 inches from the edge of the paved portion of the path width. Do not provide space between multiple panels. Using the typical panel sizes mentioned above. A 10-ft wide path would need 5 – 2' x 2' panels to cover the full width, or 4 – 2' x 2' and 1 – 2' x 1' panel thus leaving 6 inches of concrete at the outside edge of the path.

The yellow border pavement marking is not required with the use of the Detectable Warning Field. See SDD 8D5-b for Curb Ramp pay items used for restriping of curb ramp markings.

**Contact Person:** **Pat Fleming (608) 266-8486**  
**Debby Kozol (608) 266-5096**



USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

=====	1/2" EXPANSION JOINT-SIDEWALK
- - - -	CONTRACTION JOINT FIELD LOCATED
	PAVEMENT MARKING CROSSWALK (WHITE)
— — — —	ALTERNATIVE LAYOUT



## CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

*Curb Ramps Types 2 and 3*

**References:** [FDM 11-25-30](#) and [FDM 11-20-1](#)

**Bid items associated with this drawing:**

<u>Item #</u>	<u>Title</u>
601.0600 See Sheet 'a'	Concrete Curb Pedestrian (LF)

**Standardized Special Provisions associated with this drawing:** See Sheet 'a'.

**Other SDD's associated with this drawing:** 8D5-a, c, d, e and 15C8- sheet 'e' are required when this drawing is called for in the plans.

**Design Notes:** See Sheet 'a'.

Curb Ramp pay items used for restriping of curb ramp markings are as follows

1. 647.0503 Pavement Marking Curb Ramp Paint
2. 647.0506 Pavement Marking Curb Ramp Epoxy
3. 647.0509 Pavement Marking Curb Ramp Preformed Plastic

**Contact Person:** Pat Fleming (608) 266-8486



<b>RADIUS (AT CURB FACE)</b>	<b>X</b>	<b>Y</b>
<b>20 FEET</b>	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
<b>30 FEET</b>	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
<b>40 FEET</b>	9'-5 $\frac{1}{4}$ "	6'-5"
<b>50 FEET</b>	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
<b>60 FEET</b>	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

### INTERMEDIATE RADII CAN BE INTERPOLATED



## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)  
DO NOT MARK TRANSITION NOSE.



### LEGEND

- ===== 1/2" EXPANSION JOINT-SIDEWALK  
- - - - CONTRACTION JOINT FIELD LOCATED  
||||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS  
TYPE 4A

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

*Curb Ramps Type 4A*

**References:** [FDM 11-25-30](#) and [FDM 11-20-1](#)

**Bid items associated with this drawing:**

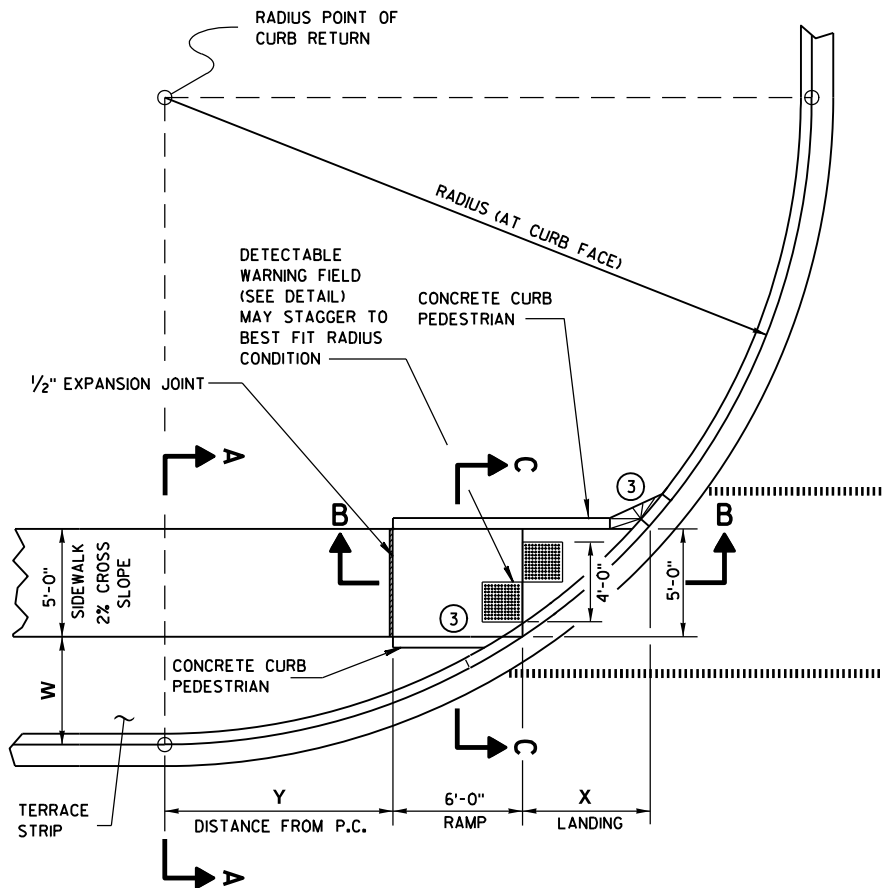
<u>Item #</u>	<u>Title</u>
601.0600 See Sheet 'a'.	Concrete Curb Pedestrian (LF)
620.0300	Concrete Median sloped Nose (SF)

**Standardized Special Provisions associated with this drawing:** See Sheet 'a'.

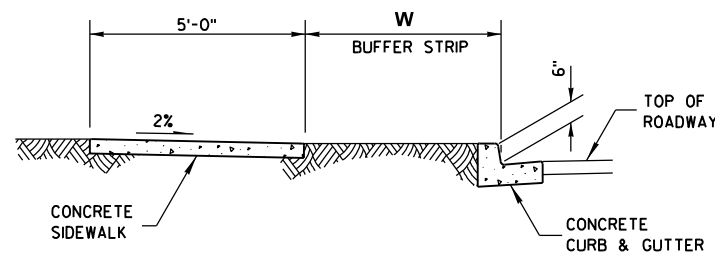
**Other SDD's associated with this drawing:** 8D5-a, b, d & e, 11B2 and 15C8-sheet 'e' are required when this drawing is called for in the plans.

**Design Notes:** See Sheet 'a'.

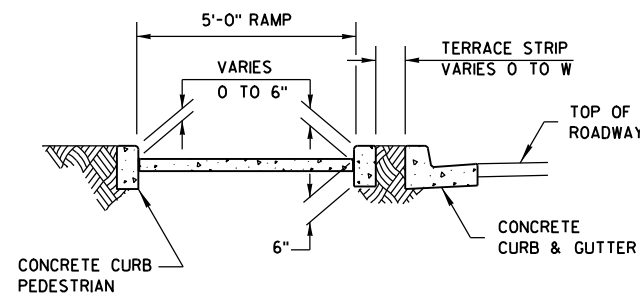
**Contact Person:** Pat Fleming (608) 266-8486



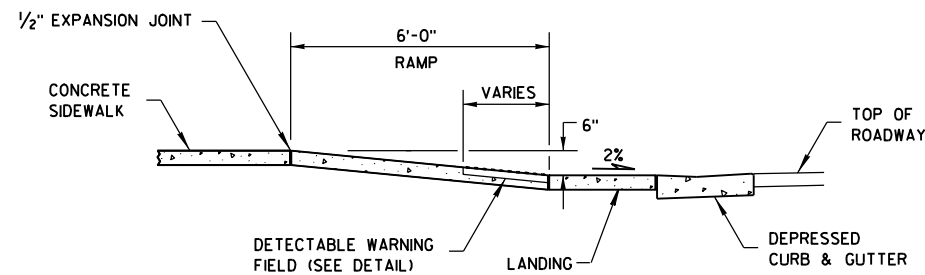
**CURB RAMP TYPE 4B  
PLAN VIEW**



**SECTION A-A**



**SECTION C-C**



**SECTION B-B**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

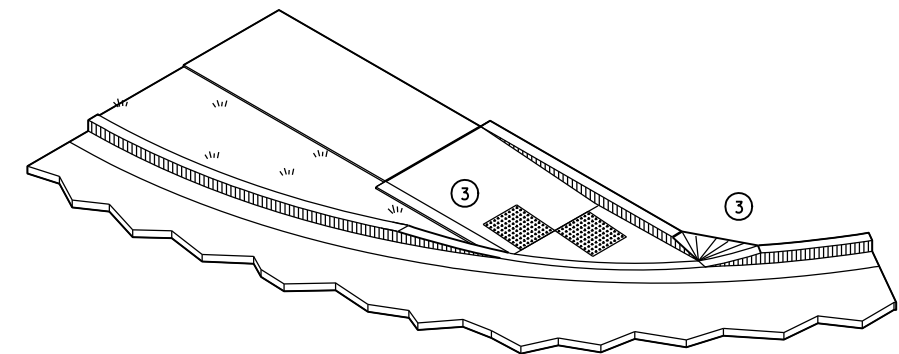
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)  
DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



**ISOMETRIC VIEW**

## LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMP  
TYPE 4B**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

*Curb Ramps Type 4B*

**References:** [FDM 11-25-30](#) and [FDM 11-20-1](#)

**Bid items associated with this drawing:**

<u>Item #</u>	<u>Title</u>
601.0600 See Sheet 'a'.	Concrete Curb Pedestrian (LF)
620.0300	Concrete Median sloped Nose (SF)

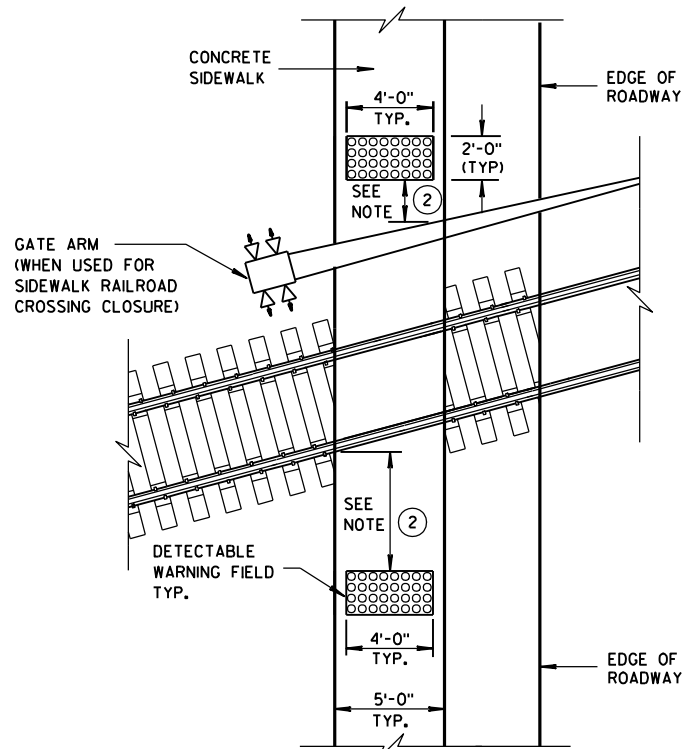
**Standardized Special Provisions associated with this drawing:** See Sheet 'a'.

**Other SDD's associated with this drawing:** 8D5-a, b, c, & e, 11B2 and 15C8- sheet 'e' are required when this drawing is called for in the plans.

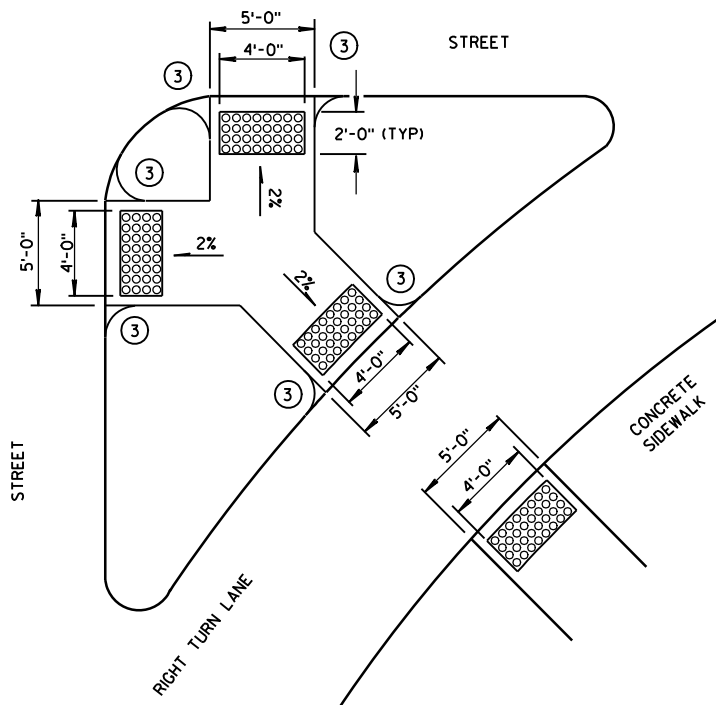
**Design Notes:** See Sheet 'a'.

**Contact Person:** Pat Fleming (608) 266-8486

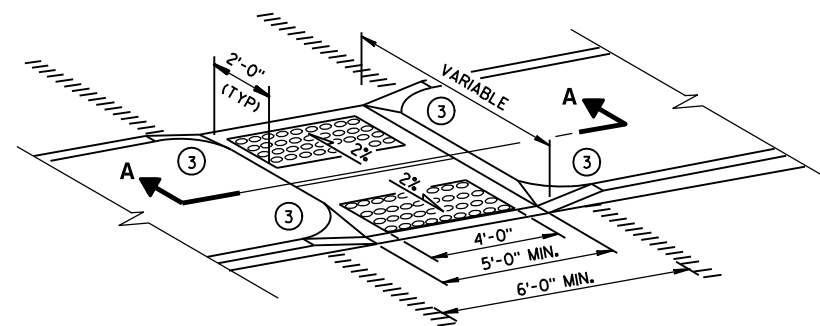




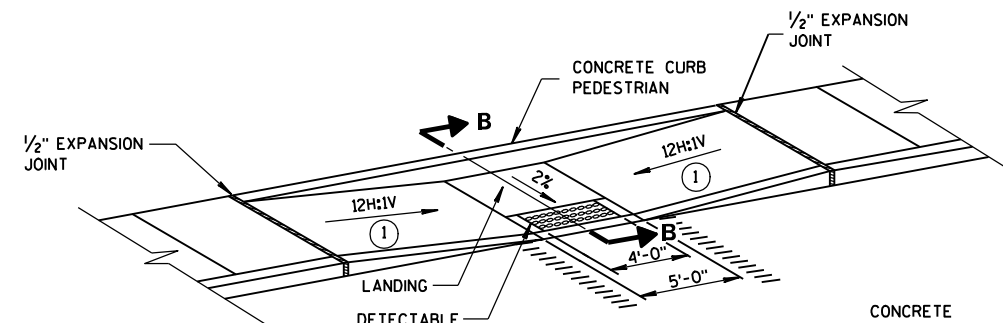
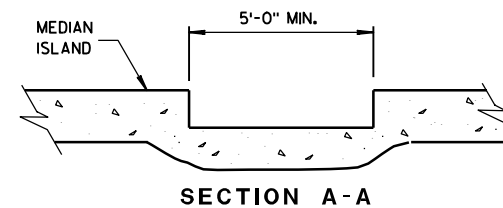
**TYPE 8**  
**DETECTABLE WARNINGS**  
**AT RAILROAD CROSSING**



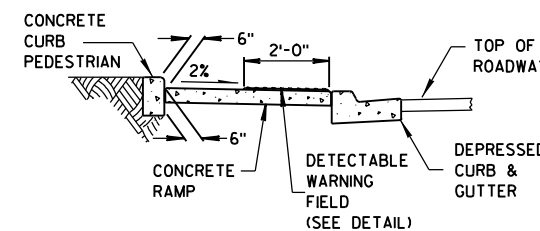
**TYPE 6**  
**DETECTABLE WARNING AT ISLANDS**



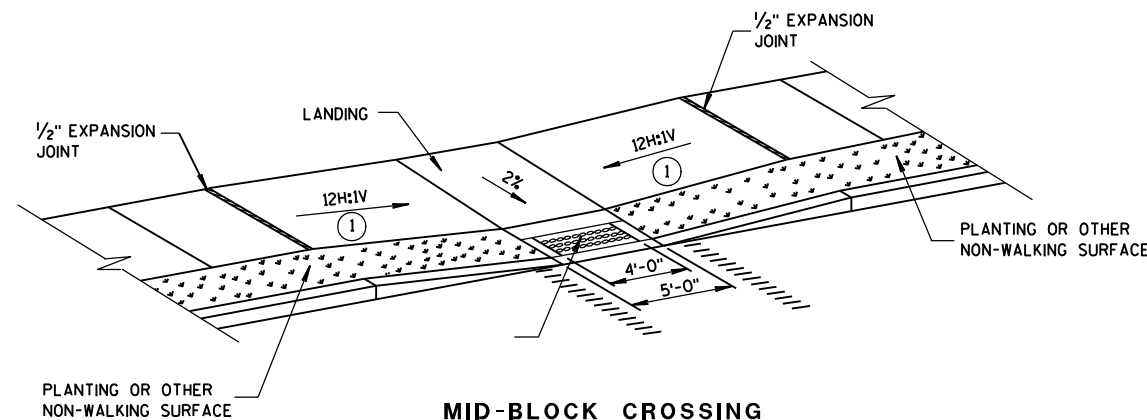
**MEDIAN ISLAND**  
**NON-ELEVATED CROSSING**  
**TYPE 5**



**MID-BLOCK CROSSING**  
**TYPE 7A**



**SECTION B-B**



**MID-BLOCK CROSSING**  
**TYPE 7B**

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS  
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

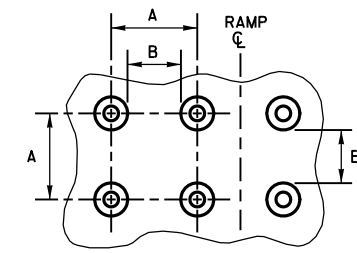
## GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ② THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)  
DO NOT MARK TRANSITION NOSE.

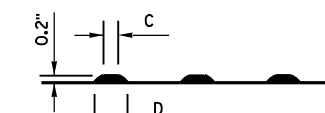
## LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

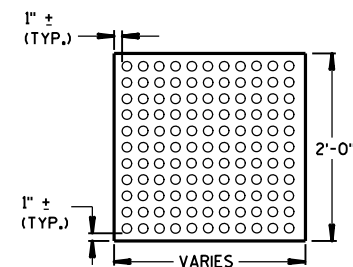
\* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



## TRUNCATED DOMES

### DETECTABLE WARNING

### PATTERN DETAIL



**PLAN VIEW**  
**DETECTABLE WARNING**  
**FIELD (TYPICAL)**

**CURB RAMPS**  
**TYPES 5, 6, 7A, 7B & 8**

**STATE OF WISCONSIN**  
**DEPARTMENT OF TRANSPORTATION**

**APPROVED**

**DATE** 2-9-10 **DATE** /S/ Jerry H. Zogg  
**FWHA** **ROADWAY STANDARDS DEVELOPMENT**  
**ENGINEER**

*Curb Ramps Type 5, 6, 7A, 7B & 8*

**References:** [FDM 11-25-30](#) and [FDM 11-20-1](#)

**Bid items associated with this drawing:**

<u>Item #</u>	<u>Title</u>
601.0600 See Sheet 'a'.	Concrete Curb Pedestrian (LF)
620.0300	Concrete Median sloped Nose (SF)

**Standardized Special Provisions associated with this drawing:** See Sheet 'a'.

**Other SDDs associated with this drawing:** 8D5-a, b, c & d, 11B2 and 15C8- sheet 'e' required when this drawing is called for in the plans.

**Design Notes:** See Sheet 'a'.